第６講　第６問徹底対策

第６問Ａ対策

A Your study group is learning about “how time of day affects people.” You have found an article you want to share. Complete the summary notes for your next meeting.

When Does the Day Begin for You?

When asked “Are you a morning person?” some reply “No, I’m a night owl.” Such people can concentrate and create at night. At the other end of the clock, a well-known proverb claims: “The early bird catches the worm,” which means that waking early is the way to get food, win prizes, and reach goals. The lark is a morning singer, so early birds, the opposite of *owls*, are *larks*. Creatures active during the day are “diurnal” and those emerging at night are “nocturnal.”

Yet another proverb states: “Early to bed, early to rise makes a man healthy, wealthy, and wise.” *Larks* may jump out of bed and welcome the morning with a big breakfast, while *owls* hit the snooze button, getting ready at the last minute, usually without breakfast. They may have fewer meals, but they eat late in the day. Not exercising after meals can cause weight gain. Perhaps *larks* are healthier. *Owls* must work or learn on the *lark* schedule. Most schooling occurs before 4:00 p.m., so young *larks* may perform certain tasks better. Business deals made early in the day may make some *larks* wealthier.

NOTE

What makes one person a *lark* and another an *owl*? One theory suggests preference for day or night has to do with time of birth. In 2010, Cleveland State University researchers found evidence that not only does a person's internal clock start at the moment of birth, but that those born at night might have lifelong challenges performing during daytime hours. Usually, their world experience begins with darkness. Since traditional study time and office work happen in daylight, we assume that day begins in the morning. People asleep are not first in line, and might miss chances.

Does everyone follow the system of beginning days in the morning? The Jewish people, an approximately 6,000-year-old religious group, believe a day is measured from sundown until the following sundown — from eve to eve. Christians continue this tradition with Christmas Eve. The Chinese use their system of 12 animals not only to mark years, but to separate each two-hour period of the day. The hour of the rat, the first period, is from 11:00 p.m. to 1:00 a.m. Chinese culture also begins the day at night. In other words, ancient customs support how *owls* view time.

NOTE

Research indicates *owls* are smarter and more creative. So, perhaps *larks* are not always wiser! That is to say, *larks* win “healthy” and sometimes “wealthy,” but they may lose “wise.” In an early report, Richard D. Roberts and Patrick C. Kyllonen state that *owls* tend to be more intelligent. A later, comprehensive study by Franzis Preckel, for which Roberts was one of the co-authors, came to the same conclusion. It is not all good news for *owls*, though. Not only can schoolwork be a challenge, but they may miss daytime career opportunities and are more likely to enjoy the bad habits of “nightlife,” playing at night while *larks* sleep. Nightlife tends to be expensive. A University of Barcelona study suggests *larks* are precise, seek perfection, and feel little stress. *Owls* seek new adventures and exciting leisure activities, yet they often have trouble relaxing.

Can people change? While the results are not all in, studies of young adults seem to say no, we are hard-wired. So, as young people grow and acquire more freedom, they end up returning to their *lark* or *owl* nature. However, concerns arise that this categorization may not fit everyone. In addition to time of birth possibly being an indication, a report published in *Nature Communications* suggests that DNA may also affect our habits concerning time. Other works focus on changes occurring in some people due to aging or illness. New research in this area appears all the time. A study of university students in Russia suggests that there are six types, so *owls* and *larks* may not be the only birds around!

Your summary notes:

When Does the Day Begin for You?

Vocabulary

Definition of diurnal: [39]

⇔ opposite: nocturnal

The Main Points

- Not all of us fit easily into the common daytime schedule, but we are forced to follow it, especially when we are children.
- Some studies indicate that the most active time for each of us is part of our nature.
- Basically, [40].
- Perspectives keep changing with new research.

Interesting Details

- The Jewish and Christian religions as well as Chinese time division, are referred to in the article in order to [41].
- Some studies show that [42] may set a person's internal clock and may be the explanation for differences in intelligence and [43].

問１　Choose the best option for [39].

① achieves goals quickly
② likes keeping pet birds
③ lively in the daytime
④ skillful in finding food

問２　Choose the best option for [40].

① a more flexible time and performance schedule will be developed in the future
② enjoying social activities in the morning becomes more important as we age
③ it might be hard for us to change what time of day we perform best
④ living on the *owl* schedule will eventually lead to social and financial benefits

問３　Choose the best option for [41].

① explain that certain societies have long believed that a day begins at night
② indicate that nocturnal people were more religious in the past
③ say that people have long thought they miss chances due to morning laziness
④ support the idea that *owls* must go to work or school on the *lark* schedule

問4　Choose the best options for [42] and [43].

① amount of sleep
② appearance
③ behavior
④ cultural background
⑤ religious beliefs
⑥ time of birth

B You are in a student group preparing a poster for a scientific presentation contest with the theme "What we should know in order to protect the environment." You have been using the following passage to create the poster.

Recycling Plastic
― What You Need to Know ―

The world is full of various types of plastic. Look around, and you will see dozens of plastic items. Look closer and you will notice a recycling symbol on them. In Japan, you might have seen the first symbol in Figure 1 below, but the United States and Europe have a more detailed classification. These recycling symbols look like a triangle of chasing pointers, or sometimes a simple triangle with a number from one to seven inside. This system was started in 1988 by the Society of the Plastics Industry in the US, but since 2008 it has been administered by an international standards organization, ASTM (American Society for Testing and Materials) International. Recycling symbols provide important data about the chemical composition of plastic used and its recyclability. However, a plastic recycling symbol on an object does not always mean that the item can be recycled. It only shows what type of plastic it is made from and that it might be recyclable.

Figure 1. Plastic recycling symbols

So, what do these numbers mean? One group (number 2, 4, and 5) is considered to be safe for the human body, while the other group (number 1, 3, 6, and 7) could be problematic in certain circumstances. Let us look at the safer group first.

High-density Polyethylene is a recycle-type 2 plastic and is commonly called HDPE. It is non-toxic and can be used in the human body for heart

NOTE

valves and artificial joints. It is strong and can be used at temperatures as low as −40℃ and as high as 100℃. HDPE can be reused without any harm and is also suitable for beer-bottle cases, milk jugs, chairs, and toys. Type 2 products can be recycled several times. Type 4 products are made from Low-density Polyethylene (LDPE). They are safe to use and are flexible. LDPE is used for squeezable bottles, and bread wrapping. Currently, very little Type 4 plastic is recycled. Polypropylene (PP), a Type 5 material, is the second-most widely produced plastic in the world. It is light, non-stretching, and has a high resistance to impact, heat, and freezing. It is suitable for furniture, food containers, and polymer banknotes such as the Australian dollar. Only 3% of Type 5 is recycled.

Now let us look at the second group, Types 1, 3, 6, and 7. These are more challenging because of the chemicals they contain or the difficulty in recycling them. Recycle-type 1 plastic is commonly known as PETE (Polyethylene Terephthalate), and is used mainly in food and beverage containers. PETE containers — or PET as it is often written in Japan — should only be used once as they are difficult to clean thoroughly. Also, they should not be heated above 70℃ as this can cause some containers to soften and change shape. Uncontaminated PETE is easy to recycle and can be made into new containers, clothes, or carpets, but if PETE is contaminated with Polyvinyl Chloride (PVC), it can make it unrecyclable. PVC, Type 3, is thought to be one of the least recyclable plastics known. It should only be disposed of by professionals and never set fire to at home or in the garden. Type 3 plastic is found in shower curtains, pipes, and flooring. Type 6, Polystyrene (PS) or Styrofoam as it is often called, is hard to recycle and catches fire easily. However, it is cheap to produce and lightweight. It is used for disposable drinking cups, instant noodle containers, and other food packaging. Type 7 plastics (acrylics, nylons, and polycarbonates) are difficult to recycle. Type 7 plastics are often used in the manufacture of vehicle parts such as seats, dashboards, and bumpers.

Currently, only about 20% of plastic is recycled, and approximately 55% ends up in a landfill. Therefore, knowledge about different types of plastic could help reduce waste and contribute to an increased awareness of the environment.

NOTE

Your presentation poster draft:

Do you know the plastic recycling symbols?

What are plastic recycling symbols?

[44]

Types of plastic and recycling information

Type	Symbol	Description	Products
1	1 PETE (PET)	This type of plastic is common and generally easy to recycle	drink bottles, food containers, etc.
2	2 HDPE	This type of plastic is easily recycled [45].	heart valves, artificial joints, chairs, toys, etc.
3	3 PVC	This type of plastic is [46].	shower curtains, pipes, flooring, etc.
4	4		

Plastics with common properties

[47]

[48]

問1　Under the first poster heading, your group wants to introduce the plastic recycling symbols as explained in the passage. Which of the following is the most appropriate? [44]

① They are symbols that rank the recyclability of plastics and other related problems.
② They provide information on the chemical make-up and recycling options of the plastic.
③ They tell the user which standards organization gave them certificates for general use.
④ They were introduced by ASTM and developed by the Society of the Plastics Industry.

問2　You have been asked to write descriptions of Type 2 and Type 3 plastics. Choose the best options for [45] and [46].

Type 2 [45]
① and commonly known as a single-use plastic
② and used at a wide range of temperatures
③ but harmful to humans
④ but unsuitable for drink containers

Type 3 [46]
① difficult to recycle and should not be burned in the yard
② flammable; however, it is soft and cheap to produce
③ known to be a non-toxic product
④ well known for being easily recyclable

問3 You are making statements about some plastics which share common properties. According to the article, which two of the following are appropriate? (The order does not matter.) [47] ・ [48]

① Boiling water (100℃) can be served in Type 1 and Type 6 plastic containers.

② It is easy to recycle products with Type 1, 2, and 3 logos.

③ Products with the symbols 1, 2, 4, 5, and 6 are suitable for food or drink containers.

④ Products with Type 5 and Type 6 markings are light in weight.

⑤ Type 4 and 5 plastics are heat resistant and are widely recycled.

⑥ Type 6 and 7 plastics are easy to recycle and environmentally friendly.

共通テスト直前対策講座 英語（リーディング）　第６講　解答

A

解答

問１ ③　　問２ ③　　問３ ①　　問４ ⑥ ③

本文の全訳

A あなたの研究グループは，「１日の時間がどのように人に影響を与えるか」を学んでいる最中だ。あなたは，共有したい記事を見つけた。次の会議に向けて，要約メモを完成させなさい。

あなたにとって１日はいつ始まるのか？

「あなたは朝型の人ですか？」と尋ねられると，「いいえ，夜のフクロウ（夜型）です」と答える人がいる。そのような人は，夜に集中して創作活動ができるものだ。時計の反対側では，有名なことわざが主張する。「早起きは三文の徳」は，早く起きることが食料を手に入れたり，賞を獲得したり，目標に到達できる方法であるという意味だ。ヒバリは朝にさえずる鳥なので，夜型人間（フクロウ）の反対の早起きをする鳥が朝型人間（ヒバリ）だ。日中活発な生き物は，「昼行性」で，夜に出没する生き物は「夜行性」だ。

しかし，もう１つのことわざがこう述べる。「早寝早起きは，人を健康的に，裕福に，賢くする」と。朝型人間はベッドから跳ね起きて，たくさん朝食を食べて，朝を歓迎するかもしれないが，夜型人間は目覚ましのスヌーズボタンを押して，ギリギリで準備をして，たいていは朝食を食べない。彼らは食事の回数がより少ないかもしれないが，食べるのは１日の遅い時間だ。食後に運動しないと体重が増える可能性がある。おそらく，朝型人間はより健康的だ。夜型人間は，朝型人間のスケジュールで仕事や勉強をしなければならない。ほとんどの学校は午後４時までに終わるので，若い朝型人間は特定の作業をより上手にこなすかもしれない。日中早くに行われる仕事の取引は，一部の朝型人間をより裕福にするかもしれない。

なぜある人は朝型に，ある人は夜型になるのだろうか。ある理論は，朝型，夜型の好みは生まれた時間と関係していることを示唆している。2010 年に，クリーブランド州立大学の研究者たちが，人の体内時計が生まれた瞬間に始まるだけではなく，夜に生まれた人は，日中行動することが生涯困難になるかもし

れないという証拠を発見した。通常は，彼らの世界の経験は，暗闇から始まる。従来型の学習時間やオフィスワークが日中行われるので，私たちは，１日は朝に始まるものと思い込んでいる。眠っている人は，列の先頭に並ばないので，機会を逸するかもしれない。

皆が朝に１日が始まるシステムに従うのか？　およそ6000年の歴史を持つ宗教集団のユダヤ人は，１日は日没から次の日没まで，すなわち晩から晩までで計測されると信じている。キリスト教の信者は，クリスマスイブの中にこの伝統を受け継いでいる。中国人は，年数を記すだけではなく，１日の２時間ごとの刻を区切るためにも，十二支を使う。子の刻，つまり，第一の刻は，午後11時から午前１時までになる。中国の文化も，夜に１日が始まる。すなわち，古代の慣習は，夜型人間の時間の考え方を支持しているのだ。

研究によると，夜型人間は，より頭がよく，より創造的だ。だから，ひょっとすると朝型人間が常により賢いとは限らない！　すなわち，朝型人間は「健康」や時には「裕福さ」で勝利しても，「賢さ」では負けるかもしれない。初期の報告書では，リチャード・ D・ロバーツとパトリック・ C・キロネンは，夜型人間はより知能が高い傾向があると述べている。その後，ロバーツが共著者の１人となった，フランシス・プレッケルによる包括的な研究は，同じ結論に達した。もっとも，それは夜型人間にとっては，必ずしもよい知らせばかりではない。学業が困難になる可能性があるだけではなく，夜型の人間は，昼間の職業の機会を逸するかもしれないし，朝型人間が寝ている間に夜遊びをして，「夜型生活」の悪習慣を楽しむ可能性がより高い。夜型生活はお金がかかる傾向にある。バルセロナ大学の研究によると，朝型人間は正確で，完璧を目指し，ほとんどストレスを感じないことが示されている。夜型人間は，新しい冒険や刺激的な余暇の活動を求めるが，彼らがくつろぐのに苦労するのはよくあることだ。

人は変われるのか？　結果がすべて出ているわけではないが，成人若年層を対象とした研究によると，そうではないようで，変化しにくいのだ。それで，若者が成長して，より多くの自由を手にするにつれて，結局その朝型，あるいは夜型の性質に戻って来る。しかし，この分類が皆に当てはまるわけではないかもしれないという懸念が生じる。生まれた時間が指示する可能性があるだけでなく，Nature Communicationsで公表された報告によると，DNAが私たちの時間に関する習慣にも影響を与えるかもしれない。他の研究は，加齢や病気が原因で一部の人に起こる変化に焦点を当てている。この領域の新しい研究は絶えず登場している。ロシアの大学生の研究によると，６つのタイプがあるとのことなので，ヒバリやフクロウが周りにいる唯一の鳥というわけではないかもしれない！

B

解答

問1　②　　問2　45　②　46　①　　問3　③－④

本文の全訳

B　あなたは,「環境を守るために私たちが知るべきこと」というテーマの, 科学のプレゼンテーション・コンテストに向けてポスターを準備している学生グループにいる。ポスターを作るために, 次の文章を使用しているところだ。

プラスチックの再利用
—あなたが知る必要のあること—

世界は様々な種類のプラスチックでいっぱいだ。周りを見渡せば, あなたは何十個ものプラスチック製品を目にするだろう。よく見ると, その製品についているリサイクルマークに気付くだろう。日本では, 下の図1の最初のマークは見たことがあるかもしれないが, アメリカやヨーロッパでは, もっと細かい分類をしている。これらのリサイクルマークは, 追跡する矢印の三角形のように見えたり, あるいは内側に1〜7の数字がある単純な三角形のように見えたりすることもある。このシステムは, アメリカのプラスチック産業協会によって1988年に始められたが, 2008年以来国際標準化機構であるASTM(米国材料試験協会)インターナショナルによって, 管理されてきた。リサイクルマークは, 使用されているプラスチックの化学成分やその再利用の可能性に関する重要なデータを提供している。しかし, ある物体のプラスチックのリサイクルマークは, 常にその製品が再利用できることを意味しているわけではない。それは, その製品がどんな種類のプラスチックからできているかと, 再利用できるかもしれないことを示しているだけである。

それでは, これらの数字は何を意味するのか。一つのグループ(数字の2, 4, 5)は, 人体に安全と考えられているが, 残りのグループ(数字の1, 3, 6, 7)は一定の状況下では問題になる可能性がある。より安全なグループを最初に見てみよう。

高濃度ポリエチレンは, リサイクルタイプ2のプラスチックで, 一般的にHDPEと呼ばれている。それは毒性がなく, 心臓の弁や人工関節用に人体に使

うことができる。それは強くて，マイナス40度の低温からから100度の高温まで使用できる。HDPEは，無害で再利用できるし，ビールのボトルケース，ミルク容器，椅子，おもちゃにも適している。タイプ2の製品は数回再利用できる。タイプ4の製品は低濃度ポリエチレン(LDPE)で出来ている。それらは使用するには安全で柔軟性がある。LDPEは，絞り出せるボトルやパンの包みに使用されている。現在，タイプ4のプラスチックはごくわずかしか再利用されていない。ポリプロピレン(PP)は，タイプ5の素材だが，世界で二番目に広く生産されているプラスチックだ。それは軽く，伸縮性がなく，衝撃，熱，冷凍に抵抗力がある。それは，家具，食品の容器，そしてオーストラリアドルのようなポリマー紙幣に適している。タイプ5の3%しか再利用されていない。

さて，二番目のグループを見てみよう。タイプ1，3，6と7だ。これらは含まれている化学物質や再利用が難しいことから，より困難になる。リサイクルタイプ1のプラスチックは，一般的にPETE(ポリエチレン テレフタレート)として知られており，主に食品や飲み物の容器に使われる。PETEの容器，あるいは日本でよくされる表記によるとPETは，しっかりと洗うのが難しいので，一度しか使うべきではない。また，一部の容器が柔らかくなり，変形することがあるので，70度以上に加熱すべきではない。汚染されていないPETEは再利用しやすく，新しい容器，衣服，カーペットに作り変えることができるが，もしPETEが塩化ポリビニル(PVC)で汚染されているなら，再利用できない可能性がある。タイプ3のPVCは，既知の物質の中で最も再利用しにくいプラスチックの一つとみなされている。処理は専門家だけが行うべきであり，家の中や庭で火をつけてはならない。タイプ3のプラスチックは，シャワーカーテンやパイプ，フローリングで目にする。タイプ6のポリスチレン(PS)，すなわち発泡スチロールと呼ばれることの多いものは，再利用が難しく，簡単に着火する。しかし，それは安価に作れ，軽量だ。使い捨ての飲料カップ，カップ麺の容器，他の食品の包装に使われている。タイプ7のプラスチック(アクリル，ナイロン，そしてポリカーボネート)は，再利用が難しい。タイプ7のプラスチックは，座席やダッシュボード，バンパーのような車両部品の製造に使用されることが多い。

現在，プラスチックのおよそ20%しか再利用されず，およそ55%が最終的に埋立地に行き着く。それゆえ，プラスチックの異なる種類に関して知っておけば，廃棄物を減らし，環境への関心を高めるのに役立つだろう。

第６講　重要語彙リスト

＊一つ一つ何度も繰り返して，覚えてください

1	summary	要約
2	owl	フクロウ，夜型の人間
3	concentrate	集中する
4	proverb	ことわざ
5	claim	主張する
6	lark	ヒバリ，朝型の人間
7	opposite	反対
8	creature	生き物
9	diurnal	昼行性
10	emerge	現れる
11	nocturnal	夜行性
12	snooze button	目覚まし時計のスヌーズボタン
13	at the last minute	土壇場で
14	preference	好み
15	have to do with	～と関係がある
16	evidence	証拠
17	assume	思い込む
18	approximately	およそ
19	Jewish	ユダヤ教の，ユダヤ人の
20	sundown	日没
21	mark	記す
22	separate	分ける
23	smart	頭がよい
24	that is to say	すなわち
25	intelligent	知的な
26	comprehensive	包括的な
27	co-author	共著者
28	conclusion	結論
29	precise	正確な
30	have trouble doing	～するのに苦労する
31	hard-wired	固有で変化しにくい
32	end up doing	最終的に～する
33	categorization	分類
34	indication	指示

35	theme	テーマ
36	passage	文章
37	be full of	～でいっぱいだ
38	classification	分類
39	triangle	三角形
40	chase	追跡する
41	administer	管理する
42	chemical	化学の
43	composition	構成
44	object	物体
45	problematic	問題になる
46	density	密度
47	toxic	有害な
48	valve	（心臓の）弁
49	artificial joint	人工関節
50	temperature	温度
51	flexible	柔軟な
52	currently	現在
53	resistance	耐性
54	freezing	凍結
55	container	容器
56	banknote	紙幣
57	beverage	飲み物
58	thoroughly	完全に
59	soften	柔らかくなる
60	contaminate	汚染する
61	dispose of	処理する
62	vehicle	車両
63	bumper	バンパー
64	end up	最終的に～になる
65	landfill	埋立地
66	contribute to	～に貢献する

第６問Ａ対策　音読用白文　①②③④⑤⑥⑦⑧⑨⑩

When Does the Day Begin for You?

When asked "Are you a morning person?" some reply "No, I'm a night owl." Such people can concentrate and create at night. At the other end of the clock, a well-known proverb claims: "The early bird catches the worm," which means that waking early is the way to get food, win prizes, and reach goals. The lark is a morning singer, so early birds, the opposite of *owls*, are *larks*. Creatures active during the day are "diurnal" and those emerging at night are "nocturnal."

Yet another proverb states: "Early to bed, early to rise makes a man healthy, wealthy, and wise." *Larks* may jump out of bed and welcome the morning with a big breakfast, while *owls* hit the snooze button, getting ready at the last minute, usually without breakfast. They may have fewer meals, but they eat late in the day. Not exercising after meals can cause weight gain. Perhaps *larks* are healthier. *Owls* must work or learn on the *lark* schedule. Most schooling occurs before 4:00 p.m., so young *larks* may perform certain tasks better. Business deals made early in the day may make some *larks* wealthier.

What makes one person a *lark* and another an *owl*? One theory suggests preference for day or night has to do with time of birth. In 2010, Cleveland State University researchers found evidence that not only does a person's internal clock start at the moment of birth, but that those born at night might have lifelong challenges performing during daytime hours. Usually, their world experience begins with darkness. Since traditional study time and office work happen in daylight, we assume that day begins in the morning. People asleep are not first in line, and might miss chances.

Does everyone follow the system of beginning days in the morning? The Jewish people, an approximately 6,000-year-old religious group, believe a day is measured from sundown until the following sundown — from eve to eve. Christians continue this tradition with Christmas Eve. The Chinese use their system of 12 animals not only to mark years, but to separate each two-hour period of the day. The hour of the rat, the first period, is from 11:00 p.m. to 1:00 a.m. Chinese culture also begins the day at night. In other words, ancient customs support how *owls* view time.

Research indicates *owls* are smarter and more creative. So, perhaps *larks* are not always wiser! That is to say, *larks* win "healthy" and sometimes "wealthy," but they may lose "wise." In an early report, Richard D. Roberts and Patrick

C. Kyllonen state that *owls* tend to be more intelligent. A later, comprehensive study by Franzis Preckel, for which Roberts was one of the co-authors, came to the same conclusion. It is not all good news for *owls*, though. Not only can schoolwork be a challenge, but they may miss daytime career opportunities and are more likely to enjoy the bad habits of "nightlife," playing at night while *larks* sleep. Nightlife tends to be expensive. A University of Barcelona study suggests *larks* are precise, seek perfection, and feel little stress. *Owls* seek new adventures and exciting leisure activities, yet they often have trouble relaxing.

Can people change? While the results are not all in, studies of young adults seem to say no, we are hard-wired. So, as young people grow and acquire more freedom, they end up returning to their *lark* or *owl* nature. However, concerns arise that this categorization may not fit everyone. In addition to time of birth possibly being an indication, a report published in *Nature Communications* suggests that DNA may also affect our habits concerning time. Other works focus on changes occurring in some people due to aging or illness. New research in this area appears all the time. A study of university students in Russia suggests that there are six types, so *owls* and *larks* may not be the only birds around!

第６問Ｂ対策　音読用白文　①②③④⑤⑥⑦⑧⑨⑩

Recycling Plastic
—What You Need to Know—

The world is full of various types of plastic. Look around, and you will see dozens of plastic items. Look closer and you will notice a recycling symbol on them. In Japan, you might have seen the first symbol in Figure 1 below, but the United States and Europe have a more detailed classification. These recycling symbols look like a triangle of chasing pointers, or sometimes a simple triangle with a number from one to seven inside. This system was started in 1988 by the Society of the Plastics Industry in the US, but since 2008 it has been administered by an international standards organization, ASTM (American Society for Testing and Materials) International. Recycling symbols provide important data about the chemical composition of plastic used and its recyclability. However, a plastic recycling symbol on an object does not always mean that the item can be recycled. It only shows what type of plastic it is made from and that it might be recyclable.

So, what do these numbers mean? One group (numbers 2, 4, and 5) is considered to be safe for the human body, while the other group (numbers 1, 3, 6, and 7) could be problematic in certain circumstances. Let us look at the safer group first.

High-density Polyethylene is a recycle-type 2 plastic and is commonly called HDPE. It is non-toxic and can be used in the human body for heart valves and artificial joints. It is strong and can be used at temperatures as low as -40℃ and as high as 100℃ . HDPE can be reused without any harm and is also suitable for beer-bottle cases, milk jugs, chairs, and toys. Type 2 products can be recycled several times. Type 4 products are made from Low-density Polyethylene (LDPE). They are safe to use and are flexible. LDPE is used for squeezable bottles, and bread wrapping. Currently, very little Type 4 plastic is recycled. Polypropylene (PP), a Type 5 material, is the second-most widely produced plastic in the world. It is light, non-stretching, and has a high resistance to impact, heat, and freezing. It is suitable for furniture, food containers, and polymer banknotes such as the Australian dollar. Only 3% of Type 5 is recycled.

Now let us look at the second group, Types 1, 3, 6, and 7. These are more challenging because of the chemicals they contain or the difficulty in recycling them. Recycle-type 1 plastic is commonly known as PETE (Polyethylene Terephthalate), and is used mainly in food and beverage containers. PETE containers — or PET as it is often written in Japan — should only be used once as they are difficult to clean thoroughly. Also, they should not be heated above 70℃ as this can cause some containers to soften and change shape. Uncontaminated PETE is easy to recycle and can be made into new containers, clothes, or carpets, but if PETE is contaminated with Polyvinyl Chloride (PVC), it can make it unrecyclable. PVC, Type 3, is thought to be one of the least recyclable plastics known. It should only be disposed of by professionals and never set fire to at home or in the garden. Type 3 plastic is found in shower curtains, pipes, and flooring. Type 6, Polystyrene (PS) or Styrofoam as it is often called, is hard to recycle and catches fire easily. However, it is cheap to produce and lightweight. It is used for disposable drinking cups, instant noodle containers, and other food packaging. Type 7 plastics (acrylics, nylons, and polycarbonates) are difficult to recycle. Type 7 plastics are often used in the manufacture of vehicle parts such as seats, dashboards, and bumpers.

Currently, only about 20% of plastic is recycled, and approximately 55% ends up in a landfill. Therefore, knowledge about different types of plastic could help reduce waste and contribute to an increased awareness of the environment.